

9. An assay for determining the concentration of epidermal growth factor receptor in a biological sample from a human patient, the assay comprising:

- a) obtaining a biological sample from the patient;
- b) contacting an amount of a first purified antibody that specifically reacts with a first epitope of the extracellular ligand binding domain of sErbB1 with the patient biological sample to be tested, wherein the first purified antibody is modified with a first labeling moiety;
- c) contacting the sample with an amount of a second purified antibody that specifically reacts with a second epitope of the extracellular ligand binding domain of sErbB1, wherein the second purified antibody is modified with a second labeling moiety, and wherein the second purified antibody does not competitively inhibit the binding of the first purified antibody; and
- d) detecting the co-presence of the first and second labels to determine the concentration of the epidermal growth factor receptor complexed with the antibodies; wherein one of the antibodies is chosen from the group consisting of: MAb R.1 and antibodies which competitively inhibit the binding of MAb R.1 to ErbB1; and wherein the other antibody is chosen from the group consisting of MAb 528 and antibodies which competitively inhibit the binding of MAb 528 to ErbB1;
- e) comparing the concentration of epidermal growth factor receptor obtained in step d) with a normal value; and
- f) correlating a decrease in the concentration of epidermal growth factor receptor in the patient biological sample with the presence of a carcinoma in the patient.

11. The assay of claim 9 wherein the patient biological sample is chosen from the group consisting of blood, serum and plasma.

9. (As further amended herein) An assay for determining the concentration of epidermal growth factor receptor in a biological sample from a human patient, the assay comprising:

- a) obtaining a biological sample from the patient;
- b) contacting an amount of a first purified antibody that specifically reacts with a first epitope of the extracellular ligand binding domain of sErbB1 with the patient biological sample to be tested, wherein the first purified antibody is modified with a first labeling moiety;
- c) contacting the sample with an amount of a second purified antibody that specifically reacts with a second epitope of the extracellular ligand binding domain of sErbB1, wherein the second purified antibody is modified with a second labeling moiety, and wherein the second purified antibody does not competitively inhibit the binding of the first purified antibody; [and]
- d) detecting the co-presence of the first and second labels to determine the concentration of the epidermal growth factor receptor complexed with the antibodies; wherein one of the antibodies is chosen from the group consisting of: MAb R.1 and antibodies which competitively inhibit the binding of MAb R.1 to ErbB1; and wherein the other antibody is chosen from the group consisting of MAb 528 and antibodies which competitively inhibit the binding of MAb 528 to ErbB1;
- e) comparing the concentration of epidermal growth factor receptor obtained in step d) with a normal value; and
- f) correlating a decrease in the concentration of epidermal growth factor receptor in the patient biological sample with the presence of a carcinoma in the patient.

11. (As further amended herein) The assay of claim [11] 9 wherein the patient biological sample is chosen from the group consisting of blood, serum and plasma.